Multicon
Release Notes

Revision: 6.1.5

2026-09-08

1 Overview

This document contains information about software releases for the Flashlink/VikinX Multicon element manager and system controller. The release note is cumulative, each chapter describing changes since the previous released version.

This document includes release notes for the following products based on hardware revision 5 (mk5) - Sublime X^2:

SLX2-3GHD3232-CP-DIN (23626)

SLX2-3GHD3232-CP-HDBNC (23627)

SLX2-SW-CQ1 (23632)

SLX2-SW-EMB1 (23633)

SLX2-SW-VX-WCTRL (23636)

SLX2-SW-3PP (23637)

SLX2-SW-ADD4PROCS (23983)

This document includes release notes for the following products based on hardware revision 4 (mk4):

MCON-HW-MK4 (23529)

MCON-HW-MK4-SFP (23989)

MCON-SW-FL-10 (23530)

MCON-SW-FL-80 (23531)

MCON-SW-VX-SL (23532)

MCON-SW-WCTRL (23535)

MCON-SW-3PP (23536)

MCON-SW-SECURITY (24194)

The release notes are also applicable for products based on hardware revision 2 (mk2). Note that from release 6.1.0 and later, mk2 isn't supported anymore. The product are:

Multicon GYDA (18460)

Multicon N-BOX (18461)

Multicon N-BOX+ (18462)

Multicon VX-MOD (18463)

Multicon GYDA-ONE (18464)

Multicon FR-2RU (18512)

Multicon VX-SLC (18514)

2 Release 6.1.5 (BL)

Release date : 2026-09-08
Software version : 6.1.5
Build number : 966

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.5.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.5.bin

2.1 Improvements:

Leitch Pass-Through client protocol updates.

3 Release 6.1.4 (BK)

Release date : 2025-01-29
Software version : 6.1.4
Build number : 954

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.4.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.4.bin

3.1 Improvements:

Security updates.

3.2 Corrections:

Fixes an issus on 6.1.3 where it was impossible to upgrade Sublime X^2 using Nevion Configurator.

Fixes an issue on 6.1.3 where it was impossible to upgrade Sublime X^2; using “Browse...” “Upgrade” on web interface.

Fixes an issue on 6.1.3 running on Sublime X^2 where the web interface might stop working after a while.

4 Release 6.1.3 (BJ)

Release date : 2024-04-22
Software version : 6.1.3
Build number : 937

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.3.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.3.bin

4.1 Improvements:

Security updates.

Timezone database updated.

“Multicon Security” product key always enabled.

5 Release 6.1.2 (BH)

Release date : 2022-06-29
Software version : 6.1.2
Build number : 927

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.2.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.2.bin

5.1 Improvements:

Software used for internal communication and communication between Multicons in a system updated.

5.2 Corrections:

When setting up a protocol on hardware revision 4 using COM2, it is possible to configure the port as RS422. When doing that on earlier releases, the port was set in 4-wire RS485 mode instead. This is now fixed to use RS422 mode.

Fixes an issue in Flashlink where the first matrix on the first slot on the first frame wasn't possible to control using SNMP.

SNMP MIB-file updated. Fixes an error where audioBlockFreqWordLength and audioBlockFreqSampleRate where swapped in AudioBlockEntry.

Fixes an issue where the Flashlink tab is invisible on web page.

Detecting Flashlink cards improved.

Fixes an issue in Pro-Bel SW-P-02 client where the matrix might be uncontrollable in some rare conditions.

Fixes an issue where lock/protect status was changed to unlocked if communication with a router was lost and re-established.

6 Release 6.1.1 (BG)

Release date : 2020-09-11
Software version : 6.1.1
Build number : 902

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.1.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.1.bin

6.1 Improvements:

Improved support for the following Flashlink cards: 3G-IP-MUX, AV-3G-XMUX-SFP and ETH1000-SW-COM.

6.2 Corrections:

Fixed an issue where GBE1 and GBE2 status and alarms was swapped on hardware revision 4.2.

Fixed an issue where aliases and descriptions on level inputs and outputs are lost from SNMP after a reboot.

7 Release 6.1.0 (BF)

Release date : 2019-12-17
Software version : 6.1.0
Build number : 891

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.1.0.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.1.0.bin

7.1 Improvements:

Improve the front panel on Sublime X^2 to make it possible to control the "normal" video level when 4k level is activated.

SNMP MIB updated.

7.2 Corrections:

Adjust time when a region enters/leaves daylight saving time (DST).

Fixed an issue where a removed passive Flashlink card will come back after reboot.

8 Release 6.0.8 (BE)

Release date : 2019-03-22
Software version : 6.0.8
Build number : 864

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.8.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.8.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.8.bin

8.1 Corrections:

Fixed issue in 6.0.7 where no cards are detected if MCON-SW-FL-10 product key is used.

9 Release 6.0.7 (BD)

Release date : 2019-03-20
Software version : 6.0.7
Build number : 861

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.7.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.7.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.7.bin

9.1 New features:

Added support for 3GHD-ETH-D422 and 3GHD-ETH-D422-SFP.

9.2 Improvements:

Fixed issue when some non-CWDM SFPs was reported as CWDM.

Logging which bit that changed the state of a trigger.

Enable parameter control of changeover in QUAD-CHO-2x1.

Add alarm on changeover in HDSDI-CHO-2x1.

Date/time configuration changed to set region instead of timezone. The old configuration will be used to search the region list and select the first region which is using this timezone.

MIB-file updated.

9.3 Corrections:

Fixed issue where it wasn't possible to change date/time on Sublime X^2.

Fixed issue where the Flashlink bus is going down every 10 minutes.

Fixed issue where alarm and SNMP trap settings on power supply in FR202 was lost when re-powering.

Fixed issue where SNMP traps might includes negative module number.

10 Release 6.0.6 (BC)

Release date : 2018-05-29
Software version : 6.0.6
Build number : 833

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.6.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.6.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.6.bin

10.1 New features:

Added Level Handler Host plugin for controlling dual outputs

10.2 Improvements:

Increase number of log files on Sublime X^2

10.3 Corrections:

Corrected issues with GrassValley Native protocol

Fixed issue in web matrix control scrolling

Fixed issue with Ethernet link loss on Sublime X^2

Fixed issue where alarm- and SNMP trap-configuration wasn't saved for triggers

11 Release 6.0.5 (BB)

Release date : 2018-01-17
Software version : 6.0.5
Build number : 819

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.5.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.5.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.5.bin

11.1 Improvements:

Improved handling of break on QUAD-CHO-2x4

User management updated with visible Leitch user in Nevion Configurator

Improved reporting of optical input level on loss of signal on Multicon-SFP

Improved virtual router status when levels support disconnect

Added support for new Multicon hardware 4.2

11.2 Corrections:

Fixed issue where SNMP stopped responding

Fixed issue with SNMP alarm handling on Modular routers

Fixed issue with alarm handling on FRS-HD-CHO-ASI

12 Release 6.0.4 (BA)

Release date : 2017-08-15
Software version : 6.0.4
Build number : 803

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.4.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.4.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.4.bin

12.1 Corrections:

Fixed issue with Multicon loosing status on signal presence from Sublimes during startup

Fixed error in MIB-file for MonitorTrap

Fixed issue in Leitch protocol, not able to detect Harris Platinum routers

Fixed issue in SW-P-02 protocol, disconnect was not reported correctly

Fixed issue when controlling port direction on AES32 module on Sublime X^2 32x32 and 64x64

13 Release 6.0.3 (AZ)

Release date : 2017-02-15
Software version : 6.0.3
Build number : 772

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.3.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.3.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.3.bin

13.1 New features:

Added support for QUAD-DA-1x2-PB

Added support for QUAD-CHO-2x1-PB

Added support for QUAD-CHO-2x1-PB-4K

13.2 Corrections:

Fixed issue with SSH connections using subsystems

14 Release 6.0.2

Release date : 2017-01-26
Software version : 6.0.2
Build number : 764

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.2.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.2.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.2.bin

14.1 New features:

Added support for 4K license feature on Sublime X^2

Added support for disconnect on data routers from virtual routers

Added support for FL-PSU-AC-160W-MKII

14.2 Improvements:

Support SSH subsystems for secure control and configuration

Improved alarms limits handling on Modular routers - prevents false alarms to be triggered

Improved control of 3G-IP-MUX on MRP and SNMP

14.3 Corrections:

Fixed issue with saving of alarm config and label on legacy alarm modules in Flashlink

Fixed issue with ethernet interface reporting on Multicon Mk4

15 Release 6.0.1

Release date : 2016-10-25
Software version : 6.0.1
Build number : 751

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.1.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.1.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.1.bin

15.1 Improvements:

Improved robustness of the Grass Valley Native client protocol

Better handling of TCP connections in the Leitch client protocol

15.2 Corrections:

Fixed a possible TCP client protocol reconnect issue

16 Release 6.0.0 (AY)

Release date : 2016-10.10
Software version : 6.0.0
Build number : 741

Hardware revision 2 (mk2):

Multicon firmware: multicon_mk2_6.0.0.bin

Hardware revision 4 (mk4):

Multicon firmware: multicon_mk4_6.0.0.bin

Hardware revision 5 (mk5) - Sublime X^2:

Multicon firmware: multicon_mk5_6.0.0.bin

16.1 New features for Sublime X^2 (Mk5) and Multicon Mk4:

Support for HTTPS and certificates

Support for secure and authenticated websockets

Security configuration web page

Support for SFTP

Support for SNMP v3 privacy using AES

Added internal firewall for port security

16.2 Improvements

Separated strict password setting for HTTP and SNMP

Removed access to some internal protocols from websockets

More help texts and new style on web page for SNMP configuration

Support for MRP control of audio direction on Flashlink cards

Generate and download support package on the Multicon web page

More support for SLX2-3GHD6464-CP

16.3 Corrections

Fixed inresponsive Sublime X^2 control panel when initialised without the Nevion Configurator

Updated SNMP ID for ASI-CHO-2x2

Fixed Sublime X^2 menu for version of redundant Multicon if it's not present

17 Release 5.2.1 (AW)

Release date : 2016-08-17
Software version : 5.2.1
Build number : 721

Hardware revision 2

Multicon firmware: multicon_mk2_5.2.1.bin

Hardware revision 4

Multicon firmware: multicon_mk4_5.2.1.bin

Hardware revision 5 (Sublime X^2)

Multicon firmware: multicon_mk5_5.2.1.bin

17.1 New features

Support for menu on the Sublime X^2 control panel

Support for SLX2-3GHD6464-CP

Support for AES-IPMUX and 3G-IPMUX

Support for SPG-PTP

Support for alarm on high power usage from Flashlink PSU's

17.2 Improvements

Use and update labels in alarm texts from Flashlink cards

Improved handling of configuration and status for reclockers in Flashlink cards

Updated SNMP MIB for several traps and send more details from VikinX Modular traps

Log detection of VikinX Modular cards

Improved support for ETH1000-SW-10G and 10G-TR-2

More support for nanoseconds in delay blocks for Flashlink cards

Periodical refresh on the TSL protocol to handle if an UMD restarts

17.3 Corrections

Fixed an issue related to detection of Flashlink frame type

Fixed issues related to SNMP and the internal watchdog

Fixed issue related to reading video format from UDC-3G-XMUX4 on MRP

Fixed errors and duplicates in the SNMP MIB

Fixed update of time without reboot on NTP server changes

Fixed unacknowledge of alarms on MRP clients

Inverted VikinX Modular router SNMP traps for active and inactive alarms

Fixed listing of TSL protocol in web UI key manager

Log status unknown when a Multicon is removed from the system

Fixed an SL-3GHD128 power alarm label to match label on back of router

18 Release 5.1.1 (AV)

Release date : 2016-08-11
Software version : 5.1.1
Build number : 691

Hardware revision 2

Multicon firmware: multicon_mk2_5.1.1.bin

Hardware revision 4

Multicon firmware: multicon_mk4_5.1.1.bin

Hardware revision 5 (Sublime X^2)

Multicon firmware: multicon_mk5_5.1.1.bin

18.1 Corrections

Fixed issue with external router control on serial ports from Sublime X^2

19 Release 5.1.0 (AU)

Release date : 2016-03-17
Software version : 5.1.0
Build number : 664

Hardware revision 2:

Multicon firmware: multicon_mk2_5.1.0.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.1.0.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.1.0.bin

19.1 New features

Support for HD-IP-MUX, AES-IP-MUX, 3GHD-EOOE-SFP-4, CONV-SFP-4 and 10G-TR-2

Support for T-SFP+ on ETH1000-SW-10G, HD-TD-10GMX-8 and HD-TD-10GX-6-SFP

Support for string parameters on MRP

Support for router control of Sublime X^2 64x64

Support for TSL protocol on IP and serial port

Support for SFP version of Multicon

Support for Multicon ethernet settings on the Flashlink web UI

19.2 Improvements

Updated user manuals for several Flashlink cards

Minor text improvements on some analog audio Flashlink cards

Updated SNMP ids for several Flashlink cards

Improved web display style for AES-VMUX

Enabled more alarms for the DWC-HD-DMUX

Improved save and restore of label and alarm settings for Flashklink cards

Enabled individual 100Mbps throttle for 1G ports on the ETH1000-SW-10G

19.3 Corrections

Fixed an issue related to changing hold time on some Flashlink cards

Fixed an issue related to changing ethernet speed on some Flashlink cards

Fixed level format for the HD-TD-10G to make it work on control panels

Removed an alarm for the FC-3G-EO-OE-36

Fixed alarm count SNMP OID

Avoid removing powerup detected card types on factory reset

Fixed an issue related to changing serial port mode on some Flashlink cards

Fixed an issue where netsplit and merge could result in no master for a client system

Removed a confusing part of some alarm descriptions in the Sublime 128

Fixed matrix web control view preview text for input and output

Fixed issue related to detection of some HD-OE cards

20 Release 5.0.5 (AT)

Release date : 2016-02-12
Software version : 5.0.5
Build number : 642

Hardware revision 2:

Multicon firmware: multicon_mk2_5.0.5.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.0.5.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.0.5.bin

20.1 Improvements

Add alarm count on SNMP and updated MIB

20.2 Corrections

Fixed an issue where some host protocols could fail to start properly

21 Release 5.0.4 (AS)

Release date : 2015-10-29
Software version : 5.0.4
Build number : 614

Hardware revision 2:

Multicon firmware: multicon_mk2_5.0.4.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.0.4.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.0.4.bin

21.1 Improvements

Optimized matrix control web interface

More frequent reconnect to closed TCP sockets

Use the Flashlink frame label in alarms and log

Improved synchronization of status on new and lost Multicon(s)

21.2 Corrections

Fixed a control issue when removing Multicons from the system configuration

Fixed acknowledge of device, communication and multicon lost alarms from SNMP

Fixed issue related to loss of HD-OE Flashlink cards and the internal watchdog

Fixed an endian issue related to SNMP traps on the Multicon Mk4

Fixed reset revival of removed passive Flashlink cards

22 Release 5.0.3 (AR)

Release date : 2015-09-17
Software version : 5.0.3
Build number : 595

Hardware revision 2:

Multicon firmware: multicon_mk2_5.0.3.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.0.3.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.0.3.bin

22.1 Improvements

Added new optional Flashlink frame detection method

Add date and time settings on Multicons without battery backup for RTC

Better handling of large SNMP walk in some systems

Improved handling of priority used for switching between master and slave

More signal presence functionality for the Sublime X^2

22.2 Corrections

Fixed issue with controlling routers and getting alarms via SNMP

Fixed issue with ETH1000-SW-COM hotswap handling

Fixed issue with initial SNMP state causing an internal test failure

Fixed issue with some restored alarms after power up

Fixed issue with Sublime X^2 control panel related to virtual routers

Fixed issue with control panels handling some floating point parameters

Fixed issue with save GPI labels on Multicon from web pages and SNMP

23 Release 5.0.2 (AP)

Release date : 2015-06-17
Software version : 5.0.2
Build number : 578

Hardware revision 2:

Multicon firmware: multicon_mk2_5.0.2.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.0.2.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.0.2.bin

23.1 Improvements

Improved switching between master and slave for VikinX Sublime routers

Improved communication with VikinX 3GHD256 and 3GHD32 modular cards

Improved handling of communication timeout for VikinX modular routers

24 Release 5.0.1 (AN)

Release date : 2015-06-04
Software version : 5.0.1
Build number : 567

Hardware revision 2:

Multicon firmware: multicon_mk2_5.0.1.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_5.0.1.bin

Hardware revision 5 (Sublime X^2):

Multicon firmware: multicon_mk5_5.0.1.bin

New features

Support for Sublime X^2 3GHD-32x32

Configuration of Sublime X^2 processing cores

Support for audio matrix

New hardware platform inside Sublime X^2

Support for redundant Multicon inside Sublime X^2

Routing via logical crosspoints (processing cores)

4K routing support

Support for ETH1000-SW-COM

Support for DA-3GHD-8-MkII

Support for HD-TD-10G-MXDX-SFP, HD-TD-3GDX-2-SFP and SDI-TD-3GDX-5-SFP

Added product key manager in Multicon web pages

Licensing of Sublime X^2 processing cores

24.1 Improvements

Improved health monitoring status

Improved support of ETH1000-SW-COM with port modes

Improved alarm handling when changing system configuration

Improved log entries from interal watchdog

Improved crosspoint execution time on Modular routers when using single commands on MRP

Enabled optimized communication between internal Multicon applications

Improved handling of factory reset

24.2 Corrections

Fixed issue where Multicon sometimes stops working after long period of time

Fixed issue where control panels sometimes looses connection to Multicon

Fixed issue with Flashlink alarms and GPI output status

Fixed reporting of cable driver status for Flashlink cards on web

Fixed issue where multiple Multicons (Flashlink/VikinX) are used in the same frame

Fixed issue with 160W powers loosing alarm and SNMP settings after reboot

Fixed issue with 160W powers giving false power alarms

25 Release 4.6.3 (AM)

Release date : 2015-03-19
Software version : 4.6.3
Build number : 513

Hardware revision 2:

Multicon firmware: multicon_mk2_4.6.3.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_4.6.3.bin

25.1 Improvements

Older Flashlink cards are now showing fw/hw/sw versions on SNMP

Updated MRP/NCB/GVRS protocols to echo all commands back to client

Multicon version information is logged during startup

Adjusted calculation for the almost out of memory alarm

Better handling of TCP connection errors

25.2 Corrections

Fixed issue with buffer used on Sublime 128 internal serial port

Fixed issue with locate card functionality on Flashlink cards

Avoid possible sticky alarms after multiple loss of communication

Fixed issue with reconfiguration of systems with multiple Multicons

26 Release 4.6.2 (AL)

Release date : 2015-01-13
Software version : 4.6.2
Build number : 440

Hardware revision 2:

Multicon firmware: multicon_mk2_4.6.2.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_4.6.2.bin

26.1 Improvements

Set alarms and status to unknown on loss of Multicon in a system

More consistent log and alarm on loss of Flashlink cards

26.2 Corrections

Fixed issue with loss of alarm/snmp settings after Multicon reboot

Fixed issue where Multicon web interface stopped working

Fixed minor Flashlink hot-swap issue

27 Release 4.6.1 (AK)

Release date : 2014-11-27
Software version : 4.6.1
Build number : 406

Hardware revision 2:

Multicon firmware: multicon_mk2_4.6.1.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_4.6.1.bin

27.1 Improvements

Added support for Flashlink Compact Advanced features (fw 1.3.0)

27.2 Corrections

Fixed issue with Flashlink configuration not always set from web

Fixed issue with controlling Flashlink matrices on SNMP

Fixed manual link for SFP-based Flashlink cards

Fixed issue with Flashlink card labels not saved persistent

28 Release 4.6.0 (AJ)

Release date : 2014-11-06
Software version : 4.6.0
Build number : 387

Hardware revision 2:

Multicon firmware: multicon_mk2_4.6.0.bin

Hardware revision 4:

Multicon firmware: multicon_mk4_4.6.0.bin

28.1 Improvements

Improved alarm handling for power supplies in Flashlink frame v2

Improved frame label handling for Flashlink frames, to only show frame label

Improved handling of connect/disconnect on MRP

28.2 Corrections

Fixed issue with unknown level status when Flashlink cards are lost

Fixed issue with controlling mono shufflers on MRP and SNMP

Fixed issue where serial numbers were missing in webinterface for Flashlink cards

Fixed configuration issue on 3GHD-OE-18, electrical outputs 11-14 were unaccessible

29 Release 4.5.2 (AH)

Release date : 2014-08-25
Software version : 4.5.2
Build number : 299

Hardware revision 2:

Multicon firmware : multicon_mk2_4.5.2.bin

Hardware revision 4:

Multicon firmware : multicon_mk4_4.5.2.bin

Note: Multicon 4.5.2 supports both hardware revision 2 and 4. It is critical to apply the right software file. The screenshot below shows how to determine the hardware revision (2.X implies revision 2).

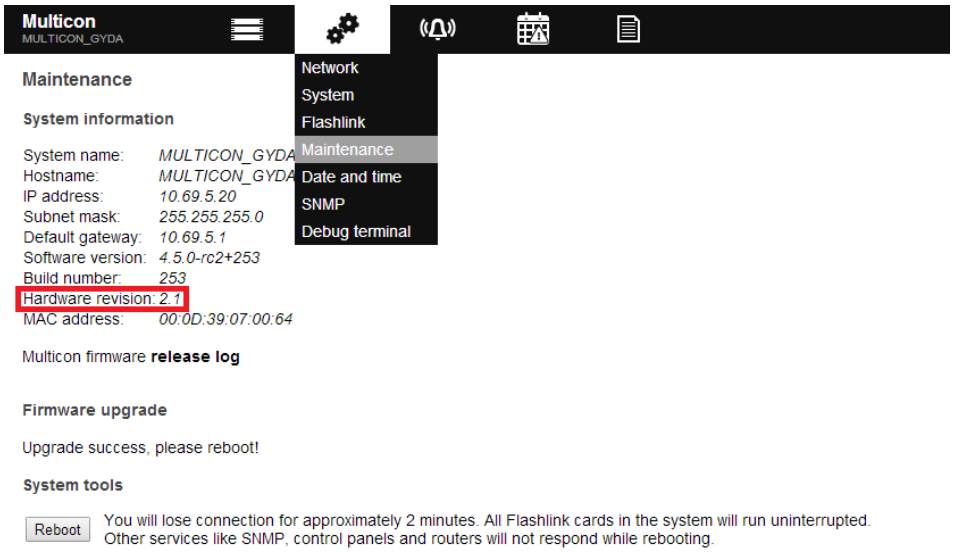


Figure 29.1 Multicon hardware revision

Note: Multicon 4.5.0 has been recalled due to critical support issues. Please upgrade to version 4.5.2 if you have this version installed.

29.1 New features

New Flashlink UI

- List-based card navigation
- Filter cards by label or cardtype
- Enhanced power supply info

Support for new Flashlink frame FR202

- Identifies frame type; FR-2RU-10-2, FR202 and FlashCase
- Power supply monitoring of temperature and voltages, with alarms and SNMP support

Added web-based management of firmware files for Flashlink cards

Added internal health alarms for monitoring Multicon performance

Added support for getting version info and serial numbers for Flashlink cards on SNMP

Support hardware revision 4 (Mk4) of Multicon

29.2 Improvements

More relevant, less redundant and improved descriptions in the log

Supports change of hostname from Nevion Configurator when configured in a system

Automatic detection of Multicon in Flashlink frame or N-Box for Flashink control

Updated error counters to be reset with SNMP set

Improved UI for HD-TD-10G-MX/DX-6

MRP supports filter command for alarms

Optimized reconnect on timeout for Sublime data routers and MRP clients

29.3 Corrections

Fixed issue with Leitch Host protocol on IP, not able to control inputs

Fixed control of Mono Shuffler output 2-4 on SNMP

Fixed issue where Multicon controls other Multicon systems

Fixed minor issues on AES-VMUX

Fixed issue with wrong icon on passive Flashlink cards

Fixed issue where GPI naming was lost during reboot on Multicon GYDA

Fixed issue on power measurement for DA-3GHD-1x8-PL

Set crosspoint status to unknown on lost Probel routers

Update status on changes to ignore on Flashlink alarms

30 Release 4.1.1 (AF)

Release date : 2014-04-02
Software version : 4.1.1
Multicon firmware: multicon_mk2_4.1.1.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.1.1_20140402.zip



Note: Multicon 4.1.1 requires **Internet Explorer 10** or higher. The latest version of Chrome and Firefox browsers is also recommended.

30.1 Improvements

Optimised performance on Flashlink web pages

30.2 Corrections

Updated power usage and schematics for DA-3GHD-1x8 variants

SMPTE 2020 enable/disable fixed for UDC-HD-XMUX4

Proper removal of Multicon alarms on netsplit

31 Release 4.1.0 (AE)

Release date : 2014-02-07
Software version : 4.1.0
Multicon firmware: multicon_mk2_4.1.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.1.0_20140207.zip

31.1 New features

New web-based alarm user interface with filtering capability.

Alarms for VikinX Sublime devices on IP and Modular routers are added.

Northbound forwarding of SNMP traps using new generic MIB structure.

Support for alarm synchronization via SNMP GET.

Added alarms for monitoring of Multicons in a system.

Distribution of alarms within a Multicon system.



Note: The legacy SNMP traps for Flashlink are still enabled by default. It is required to actively change to the new MIB structure.

31.2 Improvements

Support for specifying delay in seconds.

Added filter for illegal characters when entering Flashlink card and rack labels.

Improved handling of network split and merge, including re-synchronization of cross-point and alarm status.

31.3 Corrections

Upgrade of SL128 is fixed.

Corrected labels on fibre breakage status.

Fixed reporting of neighbor MAC address in Modular routers.

Fixed issue with ETH1000MC-SFP and ETH1000MC.

Fixed issue with Leitch PassThru host protocol and disconnect command.

32 Release 4.0.0 (AD)

Release date : 2013-10-25
Software version : 4.0.0
Multicon firmware: multicon_mk2_4.0.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.0.0_20131025.zip

32.1 New features

Web-based interface for routing control (requires new license Multicon OPT-WC) including the following features:

- List view for levels and virtual tables
- Matrix view for levels
- Salvo execution
- Lock and protect functions
- Edit of names and descriptions

Web-based configuration of typical Sublime routing systems

Web-based IP configuration

32.2 Improvements

Tabs in browser shows Multicon hostname.

AES-VMUX is supported on MRP interface.

Possible to copy text from web pages.

Updated power consumption values for downconverter products

32.3 Corrections

Fixed issues with connection lost on Flashlink web pages.

Fixed Sublime 128 to support additive input/output keys.

Fixed handling of strict password on web pages.

33 Release AC

Release date : 2013-09-04
Software version : 3.8.0
Multicon firmware: multicon_mk2_3.8.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.8.0_20130904.zip

33.1 New features

Added support for Leitch PassThru protocol over IP

Added support for Thomson/Grass Valley native protocol over serial and IP

Added support for SNMP GET/SET on level, input and output naming

Added support for AES-VMUX

33.2 Improvements

Web pages are showing Flashlink cards during detection

Updated UDC-3G card config with sharpening filters, OP-47 and label generator with moving text

33.3 Corrections

Fixed module name error on SNMP set

Fixed wrong manual links on web page

Fixed minor UI issues

Fixed scanning process when using Pro-bel SW-P-02 extended commands

34 Release AB

Release date : 2013-08-19
Software version : 3.7.1
Multicon firmware: multicon_mk2_3.7.1.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.7.1_20130816.zip

34.1 Corrections

Fixed issue with Chrome 28 and caching of Flashlink webpages

Fixed issue with IE8 and IE9, webpages was not shown

35 Release AA

Release date : 2013-05-15
Software version : 3.7.0
Multicon firmware: multicon_mk2_3.7.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.7.0_20130515.zip

35.1 New features

Added support for 3GHD-EO-18 and 3GHD-OE-18

Added support for HD-TD-10GMX-6 and HD-TD-10GDX-6

Added support for DA-VAEQ-6

Added support for setting item description on MRP

Added support for AV-3G-XMUX audio mixer options on MRP

35.2 Improvements

New look and feel in the web interface

Added power configuration (60W/75W) for Flashlink frames

Updated filter command on MRP

Labels on Flashlink matrices are shown in Nevion Configurator

35.3 Corrections

Fixed FRS-HD-DMUX label generator edit issue

Not all error bits was shown for FRS-HD-CHO and FRS-3G-CHO cards

Fixed issue with inputs using sync4 on Modular Routers

Flashlink PSU load value was accumulated on hotswap or reload of backup config

UDC-3G variants not showing correct feature set

Minor bugfixes on Flashlink cards using delay blocks

36 Release Y

Release date : 2013-01-04
Software version : 3.6.4
Multicon firmware: multicon_mk2_3.6.4.bin
Upgrade firmware : syscon_multicon_mk2_3.6.4.bin
Compact flash : multicon_3.6.4_20130104.zip

36.1 Corrections

Fixed issue related to gain settings on LB-EO and LB-OE cards

37 Release W

Release date : 2012-12-14
Software version : 3.6.3
Multicon firmware: multicon_mk2_3.6.3.bin
Upgrade firmware : syscon_multicon_mk2_3.6.3.bin
Compact flash : multicon_3.6.3_20121214.zip

37.1 New features

Added button for acknowledge all alarms

Added indication of temperature on SNMP

Added support for ETH10G-SW, SPG-AVA-DMUX

37.2 Improvements

Improved performance in modular protocol related to lock

Removed power down from web page

Updated MRP default limits on several blocks

Added manual options in CHO-block on MRP

Improved performance on GYDA webpages

37.3 Corrections

Fixed error in xp-status when switching locked outputs on Pro-Bel SW-P-02

SNMP traps doesn't contain correct value on the "moduleType" variable

ETH1000 (all variants) - not able to activate send SNMP trap on ethernet alarm

Modular Routers: Fixed redundancy handling, master and slave are not always in sync

Modular Routers: Fixed hotswap of xp-cards which makes Multicon sometimes hang or loose card communication

DWC-HD-DMUX - Fixed offset error when controlled via MRP

UDC-HD-XMUX-4 - Fixed parameter control on MRP

HDSDI-CHO-2X1-PB - Fixed parameter control on MRP

FRS-HD-CHO - Fixed parameter control on MRP

UDC-HD-XMUX4 - Fixed parameter control on MRP

Multicon is loosing control of parameter groups when upgrading from 3.6.0 and older versions

LB-EO/OE - Fixed issue when setting gain to zero

LB-EO/OE - Fixed laser alarm error

Fixed masking of video format list from scaler block in MRP

38 Release 19

Release date : 2012-09-24
Software version : 3.6.2

38.1 New features

Added support for multiple SNMP trap destinations

Added support for 10G-TR, DVI-SDI-2, SDI-DVI-2

38.2 Improvements

Added electrical input alarms on 3GHD-EO-D and MR-TR-3G

Added GPI support on ADP-3G

Increased rack label and card label size, supports now 63 characters

List of firmwares when upgrading Flashlink cards are now alphabetically sorted

Added Moscow (UTC+4) in timezones list

38.3 Corrections

Fixed problem in Pro-Bel protocol, interface was not starting up correctly

Fixed reset of error counter on DAC-SDI

Fixed temperature units card info pages

39 Release 18

Release date : 2012-09-03
Software version : 3.6.1

39.1 New features

Added support for UDC-3G-XMUX4

Added salvo trigger plugin

Added support for FRS-ASI

39.2 Improvements

Added support for extension commands in Pro-Bel SW-P-02

39.3 Corrections

Fixed bug when GYDA webpage is not responding

Fixed bug when hotswapping 3GHD-OE-2

Fixed minor bugs for FRS-HD-CHO and UDC-variants

Fixed web image on PGM-HD cards

40 Release 17

Release date : 2011-11-18
Software version : 3.6.0

40.1 New features

Added navigation buttons on card config pages

Power supply monitoring is shown in web gui

Added support for VideoIPath Inventory

Added support for SPG-AVA-DMUX, FRS-HD-CHO-ASI, ETH-1000MC-MkII, DA-3GHD-1x8, DA-3GHD-1x8-PL and 3G-TDM Dense variants

Added MRP command si, possible to retreive single destination or subset of destination statuses

Added support for controlling Flashlink from Multicon GYDA in N-BOX

40.2 Improvements

New save functionality for card settings

Alarm limits are now read-only, values are set from the factory

Added URL upgrade in firmware upgrade website

Flashlink websites improved with better card detection and status updates

Supports bi-directional UART on FRS-HD-XMUX(-R)(-L) variants

AV-HD-XMUX now shows FPGA programming progress on website

Signal integrity information is updated to show error count on first line

Avoid leaking memory on reconfiguration of clients with serial port

Corrections for mnemonics and support for icons and multiple connections in client demo plugin

New generic configuration functionality for the client demo plugin

40.3 Corrections

Fixed minor gui errors on AV-HD-XMUX

RS485 Data alarms are now configurable on XMUX-variants

Improved handling of FPGA upgrade of AV-HD-XMUX cards

Fixed sample rate converter settings in audio blocks

Fixed command echo on NCB host protocol

Fixed bypass settings in reclocker blocks on several old Flashlink cards

Fixed execution of salvos containing virtual crosspoints

41 Release 16

Release date : 2011-05-16
Software version : 3.5.3

Support for new ADP-3G, FRS-HD-PGM, AV-3G-X(L)MUX and CWDM1-18 cards

Added more signal integrity information and configuration for flashlink on web pages

Fix bug in upgrade of a MCU in SL128. Don't use "force" when upgrading from version 3.5.2

Report status as unknown when NCB routers are removed

Correction for partial lock on virtual routers on MRP protocol

Bugfix for NCB client protocol redundancy issue when master had no routers

Correction for flashlink audio block set to automatic on web page

Support for more 3G-HD-SDI format properties for flashlink cards

Optimised for reduced time on upload binary file from configurator

All flashlink parameters was not set when changing many of them on web pages

Fixed reclocker settings for old EO2 OE2 and MRTR cards

LB-EO was not able to upgrade as normal through Multicon

Fixed picture on info-page for DWC-HD-DMUX

Bugfix for changing user on a lock

Fixed hot swap bug in data link on AV-HD-XMUX

Sublime client IP: If not using local lock, unlock all outputs after connection

Multicon did not always take flashlink commands in web page when pressing OK

Re-learn flashlink card settings when changing audio direction

Draw cross on web page on both inputs and outputs for flashlink audio blocks

42 Release 15

Release date : 2011-02-28
Software version : 3.5.2

Add logging of MRP host IP connections

Fixed lock from MRP on vitual tables

Internal Sublime128 firmware upgraded to 2.5.1

Minor fixes for AAV-SD-MUX and SDI-TD-DMUX-4 web pages

Improved robustness for configuration of very large systems

Fixed version and revision text for VikinX modular cards

43 Release 14

Release date : 2011-02-03
Software version : 3.5.1

Support for new firmware in SDI-TD-MUX/DMUX Flashlink cards

Improved handling of HD-SDI center crosspoint cards in VikinX 256

Fixed update of signal presence on input out of partition size

Added function for loss of signal in Flashlink signal analyzers

Improved NCB host protocol robustness

44 Release 13

Release date : 2011-01-18
Software version : 3.5.0

Support for multistatus on virtual destinations

Support for salvo restore and revert

Fixed label function on web for AV-XMUX

Additional configuration for all CRC, UDC and UPC cards

Fixed for invalid physical in/out values in partition file

Improved performance for large systems

MRP support for more parameters in Flashlink changeovers

Handle saved configuration for Flashlink cards during upgrade from Gyda-SC to Multicon

More parameters for control of Flashlink scaler block from MRP

Improve some buffer overrun checks related to Flashlink cards

Distribute mnemonics from configuration to the complete system

Modular routers: more support for SNMP

Corrected errors in a few manual references

Added fixes in GYDA webpages for Internet Explorer 8

Fixed setting of auto/manual mode for Flashlink changeovers on SNMP

Improved redundancy behaviour for large systems

Improved Flashlink protocol parsing robustness

Fixed reading of ipconfig file after GYDA-SC upgrade when file contains both CR and LF

Support card specific HTML page for Flashlink cards

Support MRP commands alias and name

Flashlink, signal integrity, max error rate default value changed to 10

Multicon web log could cause adm restart: fixed possible buffer overrun

Removed empty slot from some log messages

Minor improvements of webpage and error messages in log

Possibility to upgrade SDI-TD-MUX/DMUX cards from Multicon

Added Do not edit file in ipconfig file

Firmware for SDI-OE-x-MkII changed: AutoByPass support removed

Include hostname in main title on web pages for easier control with several Multicons

SDI-TD-DMUX-4 alarms and input block

Improved user access handling on web

XML support for FRS-HD-XMUX4-T

Added Multicon firmware upgrade possibility on web pages

Binary multicast protocol between Multicons to improve performance

Possibility to set label on a Flashlink rack

Illegal crosspoints table functionality

45 Release 12B

Software version : 3.4.4 Release date : 2010-11-09

Fix MRP signal status present filter for virtual sources

High priority MRP ping command to avoid timeout in huge systems

Improve performance for large systems with many panels

Bugfix for 5RU analog audio modular router in stereo mode

Improve performance on configuration updates, especially for big systems

Improve Multicon webpage startup

Fix an uninitialised variable for signal status present on virtual sources

Minor improvements for host plugin wrapper

FLP4 XMUX audio source switch off could not be set if present status was auto

Correct error in image on DWC-HD-DMUX

Alarm indication in frame was missing when card had alarms

Client plugin: Avoid starting unconfigured TCP client interface

Modular 128 router: Avoid logging disconnect status warning

Manual/auto mode for HDSDI-CHO

Updated log messages related to Flashlink communication and GYDA

SDI-CHO 2x1 did not send SNMP trap on active input change

Add log events for start and stop of hotswap actions

AV-SD-XMUX - Fix errors in configuring serial link input speed and format

AAV-XMUX updated with the correct block order

AV-SD-XMUX firmware drop down lists the HD files

46 Release 12A

Release date : 2010-09-13
Software version : 3.4.3

Optimalisation for customer host plugin for dynamic mnemonics

Bugfix for monitor outputs on 3GHD modular router

Update NCB host protocol to support compact panels without routers

Bugfixes for virtual router in MRP protocols and host plugin wrapper

47 Release 11

Release date : 2010-07-09
Software version : 3.4.2

Improved handling of database query errors, which could result in inconsistently initialised virtual router

Handle read of non-existing file from configuration protocol better.

Support change of serial port configuration without reboot

Bugfix for customer host plugin for dynamic mnemonics

Avoid possible loop when removing a card in modular router and crosspoint queue contain changes

Made configuration possibility to disable NCB host protocol ACK when XP is not changed

48 Release 10

Release date : 2010-06-30
Software version : 3.4.1

Bugfix for host and client plugins

Improved performance in MRP host protocol

Parsing of modular card version and revision updated

49 Release 9

Release date : 2010-06-14
Software version : 3.4.0

Add support for usage of utilities in plugins

Support for 3G modular 256 router

Improved performance when controlling many subsystems

NCB host protocol now sends ACK also when XP is not changed

Added customer host plugin for dynamic mnemonics update in virtual router

AV-HD-XMUX now also reports laser wavelength and power on web page

Fix for AAV-HD-XMUX schematic on web page

Add log entry on SNMP configuration change

Removed dupliacte time zones and added AWDT time zone

Show modular VD64 router more correcly in configurator

Made possibility to configure existing partitions without physical routers

Handle undefined user ID in log better

Improved scripts for startup of multicon applications

Support for diagonal MRP command

Update salvo user ID on MRP lock command

FRS-HD-XMUX4: Gyda support

UDC-HD-XMUX: Add support for extended scaler block

50 Release 8

Release date : 2010-04-26
Software version : 3.3.2

Correct title on web pages to Multicon

Minor fix for configuration of wide screen signaling in video DAC's in Flashlink cards

Fixed UART configuration of parity, datalength and stopbits on XMUX cards

Speed improvements in kernel and socket handling

Split log on web pages into smaller pieces and add navigation URL's

Accept only legal values on MRP lock command

Show local time in log, depending on web configured timezone

Add laser on/off configuration on AAV-MUX-T card

Fixed signal status on HD EO/OE 2 cards

Improvements for general Flashlink card communication

Removed upgrade function for Multicon on web

Fixed audio alarm when FRS-HD-XMUX is used on SD signal

Fix for temperature alarm in Flashlink cards

Avoid alarm generation on loss of lock when reclocker is in bypass

Correct label on information web page on Flashlink changeover when processed video

Fix for signal integrity alarm on DAC-SDI cards

Implemented remaining functionality for cascaded mnemonics. Subsystem configuration of local or Multicon mnemonics. Async update of mnemonics from MRP client protocol to MRP host protocol. Start system application earlier in powerup to make initial status more predictable.

Possibility to set card type for passive Flashlink cards

Improved support for ARC cards

Fixed alarm on dynamic voltage usage depending on optical attenuation

Fixed info status on ETH1000MC cards

Handle redundant lock/protect/user info on master/slave handover

Fix for file system check files in powerup

Improve error handling for bootloader used in upgrade of Flashlink cards

Speed improvements for web pages

Add range checks on partitioned inputs and outputs

Proper initialisation of SNMP protocol for Modular routers

Support for system overview on web

Added firmware upgrade functionality and fixed hot-swap for AV-HD-XMUX

51 Release 7

Release date : 2010-02-18
Software version : 3.3.1

Log improvements

Various VikinX Modular fixes

Fixed crosspoint locking on Pro-Bel client protocol

52 Release 6

Release date : 2010-01-25
Software version : 3.3.0

Support for SL-3GHD128128

Bugfix for reporting og free CF disk space

Improvements in syncronisation of system configuration

Missing Flashlink card removed alarm fixed

Flashlink: Fixed hot-swap bug for reclockers

Increased stored log file size

Various stability and performance improvements for modular routers

Assigned user logged for 3rd party host protocols

Fixed read-only CF card problem

Fixed password protection of web pages

Fixed NCB Sublime host protocol

Flashlink card position or label correctly reported in alarm list

Fixed error messages when setting time zone

Flashlink: Fixed changeover element handling

Leitch PT protocol works properly

Fixed incorrect user ID in salvo status

53 Release 5

Release date : 2009-12-04
Software version : 3.2.0

Support for client plugins

CRC support on MRP host and MRP client

Support for MRP client on serial port

Flashlink related improvements for: changeover, video processing, delay in XMUX, stability, label generator, 3GHD-OE-L, 3GHD-EO-2, XMUX4, FPGA upgrade, audio, laser, video generator, web page, SNMP traps, card hot-swap

Added new Flashlink cards: ARC-SD-DMUX, FRS-HD-CHO 2x1

Improved modular protocol stability and functionality

Bugfix to make MRP client protocol thread safe

Redundancy improvements for master-slave handover

Fix for panel configuration on factory reset

Corrected system update typo related to host plugins

Improved, added and removed some log messages

Fixed reporting of much free CF space

Bugfix for host plugins to avoid bad performance

54 Release 3

Release date : 2009-10-13
Software version : 3.1.1

Support for Analog Audio modular routers in stereo mode.

Modular routers send sequential crosspoint discontinously fix.

Bugfix for manuals on web page.

Multicon Gyda bugfixes for TDM-MUX-4 ceq bypass and cho block pri.

55 Release 2

Release date : 2009-10-01
Software version : 3.1.0

New distributed http log feature on all Multicons.

Support for new Flashlink cards: DA-3GHD, 3G-HD/OE.

Stability fixes and improvements for Flashlink and modular.

Improved support for Probel client protocol.

SNMP support for router control.

56 Release 1

Release date : 2009-08-19
Software version : 3.0.1

Speed and stability improvements

57 Release 0

Release date : 2009-07-03
Software version : 3.0.0

First released version